

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/089382 A1(51) International Patent Classification⁷: C04B 14/02,
C09K 11/02

(21) International Application Number: PCT/US03/11633

(22) International Filing Date: 16 April 2003 (16.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/372,946 16 April 2002 (16.04.2002) US

(71) Applicant (for all designated States except US): KATCO
CORPORATION [US/US]; P.O. Box 300, Brookville, PA
15825 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): BEIMEL, Thomas, D.
[US/US]; RR1, P.O. Box 406, Brookville, PA 15825 (US).(74) Agents: BRUEHS, Martin, A. et al.; Burns, Doane,
Swecker & Mathis, LLP, P.O. Box 1404, Alexandria, VA
22313-1404 (US).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

- with international search report
- with amended claims

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LUMINOUS CEMENTITIOUS COMPOSITION AND METHODS OF MAKING AND USING THE SAME

(57) Abstract: The invention relates to a luminous composition including hydraulic cement, a polymer, limestone and micro-capsules of an alkaline earth metal aluminate encapsulated in a light-transmitting resin, light-transmitting glass or combination thereof. The invention is also directed to a method of making a luminous composition. The method includes cooling an alkaline earth metal aluminate encapsulated in a light-transmitting resin, light-transmitting glass or combination thereof to a temperature of about -250 F to about -350 F and rendering the encapsulated aluminate into a powder comprising micro-capsules of the alkaline earth metal aluminate encapsulated in the light-transmitting resin, light-transmitting glass or combination thereof, wherein the micro-capsules range in size from about 0.7 µm to about 200 µm. The method then includes combining the aluminate powder with hydraulic cement, a polymer and limestone.